

AMENDMENTS TO THE DRAWINGS

The attached "Replacement Sheets" of drawings include changes to Figures 20 and 21. The attached "Replacement Sheets," which include Figures 19 - 21, replaces the original sheets including Figures 19 - 21.

Attachment: Replacement Sheets

REMARKS

Claims 1-35 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

DRAWINGS

The office action states that Figs. 20 and 21 should be designated by a legend such as "Prior Art". Applicant attaches revised drawings for the Examiner's approval. In the revised drawings, the legend "Prior Art" is added to Figs. 20 and 21.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 3, and 4 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Hayasaka (U.S. Pat. No. 6,809,421 B1). This rejection is respectfully traversed.

Notwithstanding, Applicant amends claim 1. Support for this amendment is found at least at Page 17, lines 18-25 of the specification and Fig. 1. Amended claim 1 is directed to a method of manufacturing a semiconductor device having electrodes penetrating a semiconductor substrate, the method comprising the steps of: forming a concave portion extending from an active surface of a semiconductor substrate on which an integrated circuit is formed to an interior of the semiconductor substrate; forming a first insulating layer on an inner surface of the concave portion; filling an inner side of the first insulating layer with an electroconductive material so as to form an electrode; exposing a distal end portion of the first insulating layer by etching a rear surface of the semiconductor substrate so that a distal end portion of the electrode

protrudes from the rear surface of the substrate; forming a second insulating layer on the rear surface of the substrate; and exposing the distal end portion of the electrode by removing the first insulating layer and the second insulating layer from the distal end portion of the electrode.

In contrast, Hayasaka discloses a connect plug (corresponding to the electrode of the claimed invention) which is exposed to the rear surface of the substrate, but Hayasaka is completely silent about the distal end portion protruding from the rear surface of the substrate. On the other hand, the distal end portion of the electrode (plug portion) of the claimed invention protrudes from the rear surface of the substrate. Hayasaka fails to teach or suggest the claimed electrode having a distal end portion protruding from the rear surface of the substrate. Accordingly, Hayasaka fails to anticipate this subject matter and claim 1 is patentable over Hayasaka.

Claims 3 and 4 depend from claim 1. Accordingly, claims 3 and 4 are patentable over Hayasaka for at least the same reasons as set forth above regarding claim 1. In view of the foregoing, reconsideration and withdrawal of the rejections are respectfully requested.

ALLOWABLE SUBJECT MATTER

The Examiner states that claims 2 and 5 would be allowable if rewritten in independent form. Applicant thanks the Examiner for the indication of allowability. Applicant elects to defer rewriting these claims until after the Examiner considers the foregoing. A continuing indication of the allowability of these claims is respectfully requested.

NEW CLAIMS

Applicant adds new claims 34 and 35. Support for claim 34 can be found at least at Page 18, line 25 to Page 19, line 20 of Applicant's specification. Support for claim 35 can be found at least in Fig. 1 (e.g., "H4"). Applicant respectfully submits that Hayasaka fails to teach or suggest the subject matter of claims 34 and 35 and therefore claims 34 and 35 should be patentable over Hayasaka.

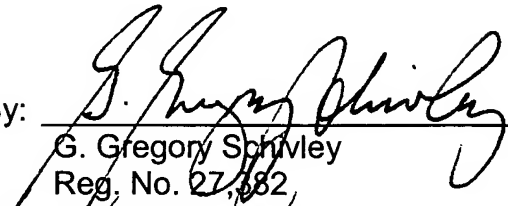
CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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